IN THE CLAIMS

The following is a complete listing of claims, including any revisions and the appropriate status identifiers.

LISTING OF CLAIMS

1.   (Original)   A method for providing a relative level of fairness and Quality of Service (QoS) in a wireless local area network (WLAN) network comprising:

identifying a set of non-interfering access points;

dividing a Contention-Free period (CFP) into one or more slots;

assigning one or more of the so divided slots to an identified access point based on the number of users associated with the access point and to maximize a lower bound of a slot-to-user ratio;

allowing only the identified set of non-interfering access points to transmit during a so divided ~~Contention-Free Period~~ (CFP) slot; and

allowing all access points to transmit after the end of the CFP.

2.   (Canceled).

3.   (Canceled).

4.   (Canceled) .

5.   (Currently Amended)   The method as in claim [[2]] 1 further comprising:

assigning at least one so divided slot to each identified access point.

6.   (Original)   The method as in claim 1 further comprising controlling each access point making up the identified set of non-interfering access points to ensure each access point begins and ends a transmission during the CFP slot.

7.   (Original)   The method as in claim 1 further comprising:

transmitting an instruction to initiate transmission of one or more beacon messages to prevent users associated with access points from transmitting prior to the beginning of the CFP.

8.   (Currently Amended)   The method as in claim 7 further comprising:

transmitting an instruction to initiate transmission of one or more beacon messages such that no two adjacent APs in an interference graph may send beacon messages [[substantially]] simultaneously.

9.   (Currently Amended)   A system for providing a level of fairness and Quality of Service (QoS) in a WLAN comprising:

a controller operable to;

identify a set of non-interfering access points;

divide a Contention-Free period (CFP) into one or more slots;

assign one or more of the so divided slots to an identified access point based on the number of users associated with the access point and to maximize a lower bound of a slot-to-user ratio;

allow only the identified set of non-interfering access points to transmit during a so divided ~~Contention Free Period~~ (CFP) slot; and

allow all access points to transmit after the end of the CFP.

10.   (Canceled).

11.   (Canceled).

12.   (Canceled).

13.   (Currently Amended)   The system as in claim [[10]] 9, wherein the controller is further operable to assign at least one so divided slot to each identified access point.

14.   (Currently Amended)   The system as in claim [[8]] 9 wherein the controller is further operable to control each access point making up the identified set of non-interfering access points to ensure each access point begins and ends a transmission during the CFP slot.

15.   (Original)   The system as in claim 9, wherein the controller is further operable to transmit an instruction to initiate transmission of one or more beacon block messages to prevent users associated with access points from transmitting prior to the beginning of the CFP.

16.   (Currently Amended)   The system as in claim 15, wherein the controller is further operable to transmit an instruction to initiate transmission of one or more beacon messages such that no two adjacent APs in an interference graph may send beacon messages [[substantially]] simultaneously.

17.   (Currently Amended)   The system as in claim 9 further comprising one or more sets of non-interfering access points, each set of access points operable to:

transmit during at least one ~~Contention-Free Period~~ (CFP~~)~~ slot; and

transmit after the end of the CFP.

18.   (Currently Amended)   A system for providing a relative level of fairness and Quality of Service (QoS) in a wireless local area network (WLAN) network comprising:

means for identifying a set of non-interfering access points;

means for dividing a Contention-Free period (CFP) into one or more slots;

means for assigning one or more of the so divided slots to an identified access point based on the number of users associated with the access point and to maximize a lower bound of a slot-to-user ratio;

means for allowing only the identified set of non-interfering access points to transmit during a so divided ~~Contention-Free Period~~ (CFP~~)~~ slot; and

means for allowing all access points to transmit after the end of the CFP.

19.   (Canceled).

20.   (Canceled).

21.   (Canceled).

22.   (Currently Amended)   The system as in claim [[19]] 18 further comprising:

means for assigning at least one so divided slot to each identified access point.

23.   (Original)   The system as in claim 18 further comprising means for controlling each access point making up the identified set of non-interfering access points to ensure each access point begins and ends a transmission during the CFP slot.

24.   (Original)   The system as in claim 18 further comprising:

means for transmitting an instruction to initiate transmission of one or more beacon messages to prevent users associated with access points from transmitting prior to the beginning of the CFP.

25.   (Currently Amended)   The system as in claim 24 further comprising:

means for transmitting an instruction to initiate transmission of one or more beacon messages such that no two adjacent APs in an interference graph may send beacon messages [[substantially]] simultaneously.